

57th Annual Meeting, Sacramento, California 22-26 July 2012

WELCOME

Sacramento's history began in 1839 when Johann Augustus Sutter settled at the confluence of the American and Sacramento Rivers. When the Mexican government and Governor Alvarado granted 48,000 acres of land to Sutter, they did not realize that they had given away a literal goldmine. Gold was discovered in 1848 just thirty miles east of Sacramento, in Coloma. The rest is history!

Peacefully located in a leafy valley of scenic rivers and canopies of trees, today's Sacramento is a cosmopolitan convergence of tall, gleaming buildings, hearty Victorians, splendid restaurants and shops, a vibrant arts scene, and a virtual cornucopia of state of the art meeting facilities. Sacramento has been called a snapshot of Wild West history in a modern, world-class city. With a plethora of first-class hotel rooms and attractions, Sacramento offers an affordable and exciting vacation and meeting destination. Its amenities combined with the rich history of California's Wild West, help visitors once again Discover Gold in California's Capital City. There is lots of information about Sacramento's activities on the [Discover Gold](#) website. Photos in this section are courtesy of the Sacramento Convention and Visitor's Bureau unless noted otherwise.



TO/FROM AIRPORT

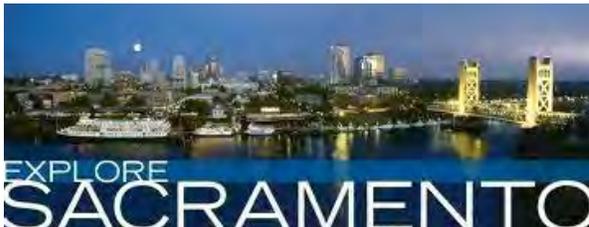
Super Shuttle offers convenient transportation to and from Sacramento International Airport each way. Reservations are required by calling 1-800-BLUE-VAN and use code **HM56X** or visiting [this SuperShuttle website link](#), with special discount code information. Taxis are located outside each terminal. Approximate cost is \$35-\$40. Towne Car/Limo Service is available by calling the Hyatt Concierge at 916-443-1234.

GETTING AROUND DOWNTOWN

Sacramento has a [Regional Transit System](#) which includes a Light Rail train and bus service. There is a Light Rail stop a couple blocks from the Convention Center and pricing for daily passes are \$6 for adults and \$3 for students ages 5-18 and seniors age 62 and over. See a map for the downtown light Rail routes [here](#).

WEATHER

The average temperatures in Sacramento in July range from a low of 59 degrees F to a high of 92 degrees F, but it can be in the high 90s to over 100 too. In July, rainfall is extremely unlikely and the relative humidity is very low. Be sure to bring a light jacket for inside the Convention Center, hotels, and for the evenings when the Delta breeze may cool things off nicely. But bring summer clothing and your hat and sunscreen for outdoor activities!



ACCOMMODATIONS

Headquarters Hotels: Hyatt Regency Sacramento & Sheraton Grand Sacramento

Hyatt Regency Sacramento, 1209 L Street, Sacramento, CA 95814, 916-443-1234

Sheraton Grand Sacramento, 1230 J Street, Sacramento, CA 95814, 916-447-1700

New this year for Registered Companions

There will not be a Hospitality Room this year

Companion Registration cost is \$110 and includes Monday-Thursday breakfast poolside at the Hyatt and the Welcome Reception at the Hyatt

Themed breakfasts (see menus below) have been planned for your enjoyment to highlight the many cultures of California. If you are registered as a companion, you are encouraged to attend each special breakfast served only from 8:00-9:00 am, poolside at the Hyatt.

Then choose from one of the two tours offered daily.

In the area surrounding the Hyatt, there are many interesting shops and galleries that you can visit on your own. See also Sites to Visit on your Own at the end of this section.

All walking tours will be led by our Hospitality Coordinator, Lynn Raabe. They are \$40 (preregistration rate) for a full day of exploration and include lunch.

Registered Companions Social Events At-A-Glance

Descriptions for all tours follow on the next page

Sunday 22 July

Welcome Reception - 6:00-7:00 pm

Cost: Included in Registration

Monday 23 July

Pan Asian Fare breakfast - 8:00-9:00 am

Miso soup, steamed pork buns, rice, juice, coffee, tea

Cost - Included in Companion registration

Poolside, Hyatt Sacramento

Walking tour of Sacramento Central City and the Railroad Museum - 9:30 am-4:30 pm

Cost - Preregistration: \$40/Onsite: \$45

Bus tour to Lake Tahoe - 8:00 am-5:00 pm

Cost - Preregistration: \$113/Onsite: \$123

Tuesday 24 July

Gold Rush Grub breakfast - 8:00-9:00 am

Biscuits with scrambled eggs, sausage and gravy, juice, coffee, tea

Cost - Included in Companion registration

Poolside, Hyatt Sacramento

Walking tour to the Crocker Museum and the State Capital - 9:30 am-4:30 pm

Cost - Preregistration: \$40/Onsite: \$45

HPS Awards Dinner - 7:00-10:00 pm

Cost - \$67, not included in registration

Wednesday 25 July

Mexican Hola breakfast - 8:00-9:00 am

Huevos Rancheros, tortillas, beans, guacamole, juice, coffee, tea

Cost - Included in Companion registration

Poolside, Hyatt Sacramento

Walking tour to Sutter's Fort and State Indian Museum - 9:30 am-4:30 pm

Cost - Preregistration: \$40/Onsite: \$45

Night Out on the Hornblower - 6:15-10:00 pm

Cost - Preregistration: \$110/Onsite: \$120

Thursday 26 July

So Long California breakfast - 8:00-9:00 am

Pancakes, maple syrup, boysenberry syrup, strawberry syrup, sausage, juice, coffee, tea

Cost - Included in Companion registration

Poolside, Hyatt Sacramento

Visit your favorite sites, again!

Bus tour is planned for 40 persons, and have a professional guide on board to explain appropriate territory and history, along the way.

Registered Companions Social Events

As we know, the first people to live in the Sacramento Valley were Indian tribes. They hunted and fished and created some truly beautiful, fine baskets woven from pine needles. It was not until the Spaniards arrived that written history began. Sacramento's history in which we are interested started in 1839 when John Sutter settled at the joining of the Sacramento and the American Rivers. Sutter's Fort became a trading center where folks swapped goods for food, clothing, and lumber. Just nine years later, in 1848, James Marshall discovered gold in the tailrace of a sawmill he was building for Sutter. Soon the Gold Rush brought 2,000 folks to the first of the gold rush towns, Coloma. And so the colorful start of our history unfolds for you . . .

Our plan for companions to the Health Physics Annual Meeting offers a full breakfast, pool-side, then two tours to choose from each day. We showcase three of the cultures which make Sacramento such an exciting city to visit, the Spanish, the Pan-Asian, and the Gold Rush.

Monday 23 July

Pan Asian Fare breakfast - 8:00-9:00 am
Miso soup, steamed pork buns, rice, juice, coffee, tea
Cost - Included in Companion registration
Poolside, Hyatt Sacramento

Walking tour of Sacramento Central City and Railroad Museum - 9:30 am-4:30 pm

Cost - Preregistration: \$40/Onsite: \$45

Today's walking tour will take you from the Hyatt, leaving at 9:30 a.m., through downtown Sacramento, ending at Old Town. The "Tales of the Central City" tour is led by a professional guide and will take about 1 1/2 hours. Our guide will explain how Sacramento became the state capital, lead you on a walk of the original route of the Pony Express, and explain why downtown streets are hollow. We will enjoy lunch at Fat City cafe. Then, on to the Railroad Museum, one of the very best in the country. Begin with the video shown upstairs, then tour the large museum. You will get on many of the cars: the mail car, the dining car, and the rocking passenger car! Then you may walk 20 or 30 minutes back to the hotel.

Bus tour to Lake Tahoe - 9:00 am-5:00 pm

Cost - Preregistration: \$113/Onsite: \$123

Our bus tour to Lake Tahoe departs promptly at 9 a.m. and takes us through some of the most spectacular scenery in California. Lake Tahoe is the largest alpine lake in North America, with deep blue waters and pristine scenery. As we wind upward, our tour director will tell us about California history and the geology of the area. We will drive to the south shore of Lake Tahoe, then board the paddlewheel boat Tahoe Bleu Wave for a two-hour tour that includes lunch, an all you-can-eat buffet. This boat ride takes us to beautiful Emerald Bay, one of the most photographed areas in the world. It is surrounded by peaks rising sharply 3,000 feet from the lake and is home to Fannette Island, Vikingsholm Castle, and Eagle Falls. Then we wend our way back to Sacramento. Be sure to bring a jacket and your camera for this lovely alpine trip.

Tuesday 24 July

Gold Rush Grub breakfast - 8:00-9:00 am
Biscuits with scrambled eggs, sausage and gravy, juice, coffee, tea
Cost - Included in Companion registration
Poolside, Hyatt Sacramento

Walking tour to the Crocker Museum and State Capitol - 9:30 am-4:30 pm

Cost - Preregistration: \$40/Onsite: \$45

Today's walking tour leaves the Hyatt at 9:30 a.m. and brings us to one of Sacramento's finest art galleries, the Crocker Art Museum. Here we will enjoy a tour of the original part of the museum, the home of the Crocker family, one of the original four families who founded the railroad. We will see some of the permanent exhibits of the museum, the lovely ballroom, and the spiral staircase. There is an exciting Museum Store where you may buy a memento of your trip. We will have lunch in the cafe in the new museum building. Then we walk to the California State Capitol. Here the past, present, and future of California interact with equal force. The building serves as both a museum and the state's working seat of government. Visitors to the California State Capitol can at once experience California's rich history and witness the making of history through the modern lawmaking process. We will see the rotunda and halls of business. Our way home takes us through the lovely gardens and past the Vietnam Veterans Memorial.

use, and bring home a vial of water with flakes of gold inside. If time allows, we will stop in Placerville, the infamous Hangtown, for an hour of shopping.

HPS Awards Dinner - 7:00-10:00 pm

Cost - \$67, not included in registration

Wednesday 25 July

Mexican Hola breakfast - 8:00-9:00 am

Huevos Rancheros, tortillas, beans, guacamole, juice, coffee, tea

Cost - Included in Companion registration

Poolside, Hyatt Sacramento

Walking tour to Sutter's Fort & State Indian Museum

- 9:30 am-4:30 pm

Cost - Preregistration: \$40/Onsite: \$45

The walking tour today takes us first to Sutter's Fort. The fort has walls that are 2 1/2 feet thick and 15 to 18 feet high within which Sutter developed what he considered to be the real wealth of California - crops such as grapes and wheat along with vast herds of cattle. Today, the fort is furnished and reconstructed to reflect its 1846 appearance. Many activities and programs recreate the past, thanks to the volunteers who give their time to share their love of California history. We will have lunch at Tres Hermanas, a fine Mexican restaurant about three blocks away. After lunch we will visit the State Indian Museum. The State Indian Museum, opened in 1940, depicts three major themes of California Indian life: nature, spirit, and family. Native peoples lived prosperously for thousands of years in what is now California. All of the exhibits and photographs on display in the museum are presented with respect for those who went before us on this land and continue to live in California communities today. Again, we walk back to the Hyatt.

Night Out on the Hornblower - 6:15-10:00 pm

Cost - Preregistration: \$110/Onsite: \$120

See page 8 for details

Capitol Pub Crawl, Rock & Roll History Tour - 7:00 pm

Cost - Preregistration: \$20/Onsite: \$25

See page 8 for details

Thursday 26 July

So Long California breakfast - 8:00-9:00 am

Pancakes, maple syrup, boysenberry syrup, strawberry syrup, sausage, juice, coffee, tea

Cost - Included in Companion registration

Poolside, Hyatt Sacramento

Visit your favorite sites, again!

SITES TO VISIT ON YOUR OWN

Sacramento Zoo - The Sacramento Zoo is located in Land Park. Open since 1927, the Sacramento Zoo is home to over 140 native, rare and endangered species. In 1927 "the little zoo in the park" was born and now comprises 14.3 acres, is beautifully landscaped and has a fine cafe. It is open daily from 9 am to 4 pm. Admission Rates: \$7.25 ages 2-11; \$11.25 over 11 years old. Get there by taxi.

Old Sacramento is the tourist's destination. It contains many curio shops, cafes, and the outstanding Railroad Museum. This museum is well worth a visit of about 2 hours, and has a fee of \$9 adults;

\$4 youths ages 6- 17; children ages 5 and under are free. The Museum is open daily from 10 am to 5 pm.

Be sure to begin your visit with the video upstairs.

Don't miss the many train cars which you walk through. There are docents to help you understand the use of each car. You may walk from the Hyatt down K St until you find Old Town. This walk is about 25 minutes long.

Sutter's Fort - John Sutter settled at the joining of the Sacramento and the American Rivers. Sutter's Fort became a trading center where folks swapped goods for food, clothing, and lumber. The fort has adobe walls that are 2 1/2 feet thick and 15 to 18 feet high within which Sutter developed what he considered to be the real wealth of California - crops such as grapes and wheat, along with vast herds of cattle. Today, the Fort is furnished and reconstructed to reflect its 1846 appearance. It is open from 10:00 am until 5:00 pm Tuesday through Sunday (closed Monday). Fees are \$7 for adults and \$5 for youths.



The Crocker Art Museum - Here you will enjoy the original part of the museum, the home of the Crocker family, one of the original 4 families who founded the railroad, as well as the new museum. You will see some of the permanent exhibits of the museum, the lovely ballroom and spiral staircase. There is an exciting museum store where you may buy a memento of your trip. You may have lunch in the cafe. Fees are \$10 for adults and \$5 for youths.

Fast Eddie Bike Tours - Midtown History Tour is 5-ish miles takes about 90 minutes. Cost is \$25, which includes bikes in very fine working order, and an informative tour. March through October available on demand with minimum of 2 riders. Start location is 23rd Street between K and I. This route emphasis is on Historic Architecture, Mansions, and People who Shaped Sacramento.

Sacramento Segway Tours - The Segway City Tour experience is approximately 2 hours. Your tour will commence with a brief introduction and safety overview of the Segway personal transporter. Once accustomed to this modern conveyance, you will embark upon the Downtown Sacramento Segway City Tour, seeing the many beautiful sights that Downtown Sacramento has to offer. Tours cost about \$80.00/person. Reservations call (916) 441-2527.

Sacramento365.com is a website designed to serve as the all-inclusive arts and entertainment resource for Sacramento County (and soon beyond). Sacramento365.com features comprehensive listings of music, theatre and dance performances, museum and gallery exhibitions, film screenings, poetry readings, cultural festivals, kids' activities, and much more, allowing you to see all Sacramento has to offer.

California State Fair – The state fair is another great place to spend the day or an evening while you are in town. There is lots of free entertainment and rides for kids at the Midway.

HPS Logo Gear - Order on the Registration form

We are very excited about the HPS Logo Gear for this summer's meeting. We are bringing back the men's and women's polo with sport-wick technology in a rich steel gray with an embroidered logo on the left shoulder. Men's polo is a standard 3 button with color. See Women's below. The T-shirts will be in a stonewashed blue with a screen printed logo on the left shoulder. Adjustments to the logo artwork shown may be made to accommodate printing needs.

We will be offering extra small and XXXL sizes for pre-orders only!



Polos

Men's and Women's polos are made of 100% polyester double mesh that is lightweight and has superior breathability. Color: Steel Gray

Logo T-shirts

Men's and Women's cut T-shirts are made of 100% cotton. Color: Stonewashed Blue



Logo Cap

This two-tone garment washed cap is soft and has a slightly worn feel. Pebble gray with Black brim. One size only.

Tours...Events...Tours...Events...Tours...Events...Tours...Events

Sunday 22 July

Welcome Reception. Hyatt Sacramento

6:00-7:00 pm

Cost: Included in Registration

Please plan on stopping in at the Hyatt Sacramento, Grand Ballroom, Sunday, 22 July, from 6:00-7:00 pm. There will be an opportunity to meet friends to start your evening in Sacramento. Cash bar and light snacks will be available.

Monday 23 July

Radioactive Mic Night. Hyatt Regency Sacramento

8:00 pm

Cost: Free

In appreciation of the many musicians and music lovers in the Health Physics Society, join our vendor-sponsored Seventh Annual Radioactive Open Mic Night on Monday night at the Hyatt Regency from 8:00 – 11:30 PM. Enjoy rock & roll music provided by a local host band. Attendees are invited to participate in the fun by joining the band onstage to play an instrument or sing a song. Have fun entertaining your friends and colleagues from the health physics community by participating in this lively and popular event! If you can't sing or play an instrument, join in the fun by cheering on the talent! Cash bar, no admission fee for meeting attendees and guests.



Tuesday 24 July

HPS Annual Awards Banquet. Hyatt Hotel

7:00-10:00 pm

Cost: Fee Included in some registrations

Additional Tickets: \$67

Join your peers in honoring awardees while enjoying a delicious meal. Brief award presentation will immediately follow the dinner. This event is included in all Member, Non-Member, Emeritus, Past President & Student registrations.

Wednesday 25 July

Ge(Li) Buster 5k Run & Walk

6:30 am

Preregistration: Runners \$25/Onsite: \$30

Walkers \$15/Onsite: \$20

The Ge(Li) Buster 5K Run & Walk will be Wednesday morning, 25 July, at 6:30 a.m. The 5k race course is set around Capitol City Park's one mile loop. Each runner's bib contains four parts representing the decay of a radionuclide. "Excess energy" (one of the four parts of your bib) will be deposited at the start line and after each of three laps. When you have reached your stable configuration (i.e. you have only one part of your bib left), the race is complete. The racers with the fastest decay rate in the open division (under 40) female and male runners and the female and male master division (40+) runners will each receive a prize. The race fee for runners is \$25 which includes t-shirts, coffee, and bagels. Walkers may register for the one mile event (one loop) which includes the t-shirt and snacks for \$15.

Tours...Events...Tours...Events...Tours...Events...Tours...Events

Night Out Dinner on the Hornblower

6:15 pm

Preregistration: \$110/Onsite: \$120

The Night Out will be a lovely evening spent cruising the Sacramento River aboard the Empress Hornblower Yacht on Wednesday, 25 July. The Empress is a 100-foot yacht which was built in Freeport, Florida in 1988. Her exterior is reminiscent of a turn of the century Paddle Wheel Riverboat, while her interior provides the elegant amenities of a luxurious hotel. She is equipped with the rich woods and shining brass typical of Hornblower's yachts. All meals are prepared on the yacht, by her talented chefs. The promenade deck and sun deck are complete with bar, and enable guests to enjoy the starlit evening. There is a dance floor. Buses will pick up at the Hyatt at 6:15 p.m. with cruise departure at 7:00 p.m. This lovely ship will take us up the Sacramento River and return us back to the dock again by 9:00 p.m. There are 2 choices for dinner for pre-registered guests: Roasted Chicken Breast with Porcini & Crimini Mushrooms Ragout or Grilled Marinated Flat Iron Steak with Demi Glace.



Technical Tour

Thursday 26 July

Lawrence Livermore National Laboratory National Ignition Facility

8:30 am-2:00 pm

Preregistration: \$27

or 9:30 am-3:00 pm

Registration only available online

The Lawrence Livermore National Laboratory (LLNL) National Ignition Facility (NIF) is the world's largest and most energetic laser system for inertial confinement fusion (ICF) and experiments studying highenergy-density (HED) science. NIF is a 192-beam, Nd-glass laser facility that is capable of producing up to 1.8 MJ, 500 TW of ultraviolet light, making it over fifty times more energetic than other existing ICF facilities. The construction of NIF began in 1997 and the facility was completed in 2009. The facility is capable of firing up to 192 laser beams onto a small target placed at the center of a 10 m spherical target chamber. The AAHP Special Session (on Tuesday, 24 July) will provide a comprehensive picture of the NIF, including an overview of the facility, its missions, and radiological program challenges and systems in place to address these challenges. Technicians adjust the target positioner inside the NIF Target Chamber. Photo courtesy of IINI. A technical tour of the NIF will be available to US citizens on Thursday, 26 July 2012. The tour itself takes about an hour, and it will take about 90 minutes by bus to get from Sacramento to Livermore. Lunch will be available for purchase at the LLNL cafeteria.



Important details:

- Space is limited to the first 99 registrants.
- Registration for this tour will close on 29 June and on-site registration will NOT be available; you must register online for this Technical Tour.
- All registrants must be US citizens and must ride the bus from Sacramento to Livermore.
- Wear comfortable walking shoes with closed toes and heels (i.e., no clog-type shoes, sandals, or spiked heels).
- There will be 2 planned departure times from the Hyatt Regency, the first at 8:30 a.m., and the second at 9:30 a.m. The anticipated return times to Sacramento are approximately 2:00 and 3:00 p.m., respectively. Indicate your preferred departure time; your actual departure time will be confirmed at registration onsite.